

Class No.	Division No. (if any)	Name of class or division	49 CFR reference for definitions
None	.....	Forbidden materials .....	173.21
None	.....	Forbidden explosives .....	173.54
1	1.1	Explosives (with a mass explosion hazard) .....	173.50
1	1.2	Explosives (with a projection hazard) .....	173.50
1	1.3	Explosives (with predominately a fire hazard) .....	173.50
1	1.4	Explosives (with no significant blast hazard) .....	173.50
1	1.5	Very insensitive explosives; blasting agents .....	173.50
1	1.6	Extremely insensitive detonating substances .....	173.50
2	2.1	Flammable gas .....	173.115
2	2.2	Non-flammable compressed gas .....	173.115
2	2.3	Poisonous gas .....	173.115
3	.....	Flammable and combustible liquid .....	173.120
4	4.1	Flammable solid .....	173.124
4	4.2	Spontaneously combustible material .....	173.124
4	4.3	Dangerous when wet material .....	173.124
5	5.1	Oxidizer .....	173.127
5	5.2	Organic peroxide .....	173.128
6	6.1	Poisonous materials .....	173.132
6	6.2	Infectious substance (Etiologic agent) .....	173.134
7	.....	Radioactive material .....	173.403
8	.....	Corrosive material .....	173.136
9	.....	Miscellaneous hazardous material .....	173.140
None	.....	Other regulated material: ORM-D .....	173.144

[Amdt. 173–224, 55 FR 52606, Dec. 21, 1990, as amended at 57 FR 45460, Oct. 1, 1992; Amdt. 173–234, 58 FR 51531, Oct. 1, 1993]

### § 173.2a Classification of a material having more than one hazard.

(a) *Classification of a material having more than one hazard.* Except as provided in paragraph (c) of this section, a material not specifically listed in the § 172.101 Table that meets the definition of more than one hazard class or division as defined in this part, shall be classed according to the highest applicable hazard class of the following hazard classes, which are listed in descending order of hazard:

(1) Class 7 (radioactive materials, other than limited quantities).

(2) Division 2.3 (poisonous gases).

(3) Division 2.1 (flammable gases).

(4) Division 2.2 (nonflammable gases).

(5) Division 6.1 (poisonous liquids), Packing Group I, poisonous-by-inhalation only.

(6) A material that meets the definition of a pyrophoric material in § 173.124(b)(1) of this subchapter (Division 4.2).

(7) A material that meets the definition of a self-reactive material in § 173.124(a)(2) of this subchapter (Division 4.1).

(8) Class 3 (flammable liquids), Class 8 (corrosive materials), Division 4.1 (flammable solids), Division 4.2 (spontaneously combustible materials), Division 4.3 (dangerous when wet materials), Division 5.1 (oxidizers) or Division 6.1 (poisonous liquids or solids other than Packing Group I, poisonous-by-inhalation). The hazard class and packing group for a material meeting more than one of these hazards shall be determined using the precedence table in paragraph (b) of this section.

(9) Combustible liquids.

(10) Class 9 (miscellaneous hazardous materials).

(b) *Precedence of hazard table for Classes 3 and 8 and Divisions 4.1, 4.2, 4.3, 5.1 and 6.1.* The following table ranks those materials that meet the definition of Classes 3 and 8 and Divisions 4.1, 4.2, 4.3, 5.1 and 6.1:

PRECEDENCE OF HAZARD TABLE  
[Hazard class and packing group]

	4.2	4.3	5.1 I <sup>1</sup>	5.1 II <sup>1</sup>	5.1 III <sup>1</sup>	6.1, I der- mal	6.1, I oral	6.1 II	6.1 III	8, I liq- uid	8, I solid	8, II liq- uid	8, II solid	8, III liq- uid	8, III solid
3 I	.....	.....	.....	.....	.....	3	3	3	3	3	( <sup>2</sup> )	3	( <sup>2</sup> )	3	( <sup>2</sup> )
3 II	.....	.....	.....	.....	.....	3	3	3	3	8	( <sup>2</sup> )	3	( <sup>2</sup> )	3	( <sup>2</sup> )
3 III	.....	.....	.....	.....	.....	6.1	6.1	6.1	3 <sup>4</sup>	8	( <sup>2</sup> )	8	( <sup>2</sup> )	3	( <sup>2</sup> )
4.1 II <sup>2</sup>	.....	4.2 4.3	5.1 4.1	4.1 4.1	4.1 4.1	6.1 6.1	6.1 6.1	4.1 4.1	4.1	( <sup>2</sup> )	8	( <sup>2</sup> )	4.1	( <sup>2</sup> )	4.1
4.1 III <sup>2</sup>	.....	4.3	5.1 4.1	5.1 4.1	4.1 4.1	6.1 6.1	6.1 6.1	6.1 4.1	4.1	( <sup>2</sup> )	8	( <sup>2</sup> )	8	( <sup>2</sup> )	4.1
4.2 II	.....	4.3	5.1 4.2	4.2 4.2	4.2 4.2	6.1 6.1	6.1 6.1	4.2 4.2	4.2	8	8	4.2	4.2	4.2	4.2
4.2 III	.....	4.3	5.1 4.2	5.1 4.2	4.2 4.2	6.1 6.1	6.1 6.1	6.1 4.2	4.2	8	8	8	8	4.2	4.2
4.3 I	.....	.....	5.1 4.3	4.3 4.3	4.3 4.3	6.1 6.1	6.1 4.3	4.3 4.3	4.3	8	4.3	4.3	4.3	4.3	4.3
4.3 II	.....	.....	5.1 4.3	4.3 4.3	4.3 4.3	6.1 6.1	6.1 4.3	4.3 4.3	4.3	8	8	8	8	4.3	4.3
4.3 III	.....	.....	5.1 4.3	5.1 4.3	4.3 4.3	6.1 6.1	6.1 4.3	6.1 4.3	4.3	8	8	8	8	4.3	4.3
5.1 I <sup>1</sup>	.....	.....	.....	.....	.....	5.1 5.1	5.1 5.1	5.1 5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
5.1 II <sup>1</sup>	.....	.....	.....	.....	.....	5.1 5.1	5.1 5.1	5.1 5.1	5.1	8	8	8	8	5.1	5.1
5.1 III <sup>1</sup>	.....	.....	.....	.....	.....	6.1 6.1	6.1 6.1	6.1 6.1	5.1	8	8	8	8	5.1	5.1
6.1 I, Dermal	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	6.1	6.1	6.1	6.1	6.1
6.1 I, Oral	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	6.1	6.1	6.1	6.1	6.1
6.1 II, Inhalation	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	6.1	6.1	6.1	6.1	6.1
6.1 II, Dermal	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	6.1	8	6.1	6.1	6.1
6.1 II, Oral	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	8	8	6.1	6.1	6.1
6.1 III	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	8	8	8	8	8

<sup>1</sup> There are at present no established criteria for determining Packing Groups for liquids in Division 5.1. For the time being, the degree of hazard is to be assessed by analogy with listed substances, allocating the substances to Packing Group I, great; II, medium; or III, minor danger.

<sup>2</sup> Substances of Division 4.1 other than self-reactive substances.

<sup>3</sup> Denotes an impossible combination.

<sup>4</sup> For pesticides only, where a material has the hazards of Class 3, Packing Group III, and Division 6.1, Packing Group III, the primary hazard is Division 6.1, Packing Group III.

NOTE 1: The most stringent packing group assigned to a hazard of the material takes precedence over other packing groups; for example, a material meeting Class 3 PG II and Division 6.1 PG I (oral toxicity) is classified as Class 3 PG I.

NOTE 2: A material which meets the definition of Class 8 and has an inhalation toxicity by dusts and mists which meets criteria for Packing Group I specified in §173.133(a)(1) must be classed as Division 6.1 if the oral or dermal toxicity meets criteria for Packing Group I or II. If the oral or dermal toxicity meets criteria for Packing Group III or less, the material must be classed as Class 8.

(c) The following materials are not subject to the provisions of paragraph (a) of this section because of their unique properties:

(1) A Class 1 (explosive) material that meets any other hazard class or division as defined in this part shall be assigned a division in Class 1. Class 1 materials shall be classed and approved in accordance with §173.56 of this part;

(2) A Division 5.2 (organic peroxide) material that meets the definition of any other hazard class or division as defined in this part, shall be classed as Division 5.2;

(3) A Division 6.2 (infectious substance) material that also meets the definition of another hazard class or division, other than Class 7, or that also is a limited quantity Class 7 material, shall be classed as Division 6.2;

(4) A material that meets the definition of a wetted explosive in §173.124(a)(1) of this subchapter (Division 4.1). Wetted explosives are either specifically listed in the §172.101 Table or are approved by the Associate Administrator for Hazardous Materials Safety (see §173.124(a)(1) of this subchapter); and

(5) A limited quantity of a Class 7 (radioactive) material that meets the definition for more than one hazard class or division shall be classed in accordance with §173.423.

[Amdt. 173–224, 55 FR 52606, Dec. 21, 1990, as amended at 56 FR 66264, Dec. 20, 1991; Amdt. 173–241, 59 FR 67490, Dec. 29, 1994; Amdt. 173–247, 60 FR 48787, Sept. 20, 1995; Amdt. 173–244, 60 FR 50307, Sept. 28, 1995]

### §173.3 Packaging and exceptions.

(a) The packaging of hazardous materials for transportation by air, highway, rail, or water must be as specified in this part. Methods of manufacture,

packing, and storage of hazardous materials, that affect safety in transportation, must be open to inspection by a duly authorized representative of the initial carrier or of the Department. Methods of manufacture and related functions necessary for completion of a DOT specification or U.N. standard packaging must be open to inspection by a representative of the Department.

(b) The regulations setting forth packaging requirements for a specific material apply to all modes of transportation unless otherwise stated, or unless exceptions from packaging requirements are authorized.

(c) Salvage drums. Packages of hazardous materials that are damaged, defective, or found leaking and hazardous materials that have spilled or leaked may be placed in a metal or plastic removable head salvage drum that is compatible with the lading and shipped for repackaging or disposal under the following conditions:

(1) The drum must be a UN 1A2, 1B2, 1N2 or 1H2 tested and marked for Packing Group III or higher performance standards for liquids or solids and a leakproofness test of 20 kPa (3 psi). Alternatively, a drum manufactured and marked prior to October 1, 1993 as a salvage drum, in accordance with the provisions of this section in effect on September 30, 1991, is authorized. Capacity of the drum may not exceed 450 L (119 gallons).

(2) Each drum shall be provided when necessary with sufficient cushioning and absorption material to prevent excessive movement of the damaged package and to eliminate the presence of any free liquid at the time the salvage drum is closed. All cushioning and absorbent material used in the drum must be compatible with the hazardous material.

(3) Each drum shall be marked with the proper shipping name of the material inside the packaging and the name and address of the consignee. In addition, the drum shall be marked “Salvage Drum”.

(4) Each drum shall be labeled as prescribed for the respective material.

(5) The shipper shall prepare shipping papers in accordance with subpart C of part 172 of this subchapter.